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Partisanship, politics, and the energy transition in the United States: A critical review and conceptual framework



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ABSTRACT

Partisan rancor has markedly increased in the U.S., with significant divides between Republicans and Democrats in both the public and in government on a range of policy issues. Current partisanship extends beyond policy differences, however, in that Republicans and Democrats also hold different understandings of several empirical issues—such as climate change or the public health impacts of energy development. We propose a four-part conceptual framework to understand the role of partisanship in energy transition with a focus on the United States. We suggest that partisanship has four key dimensions: cue receptivity, expressive partisanship, negative partisanship, and performative partisanship. We identify research needs to understand and mitigate the role of partisanship in energy transition.

1. Partisanship and energy transition

Compared to its peer nations, the U.S. is unique in that it has only two viable political parties—these parties increasingly struggle to cooperate in governance, and partisanship among voters has also grown [1,2]. At the same time that partisanship has intensified, the U.S. energy system is at a unique historical juncture. In the early 2000s, wind and solar provided a scant portion of total energy produced in the U.S., but currently account for some 8% and 2% [49,50]. This period also saw development of onshore oil and gas resources via unconventional technologies [3]. The U.S. coal industry has shrunk and a dismal future is projected for the industry [4]. Hence, the energy transition may allow the U.S. to decarbonize without increased costs or loss of services.

Yet partisanship can threaten the energy transition, as it has been linked to legislative gridlock and unwillingness to compromise [5,6,1]. Unsurprisingly, Republicans and Democrats in the public differ on many, but not all, energy policy issues (e.g. [7,51]) and partisans are more likely to endorse renewable energy policies if they are supported by their party leaders [8]. State governments with Democratic leadership are more apt to implement renewable and energy efficiency policies, though some Republican legislatures enact said policies [9–12] and some conservative activists frame renewable energy as consistent with conservative ideological principles [11]. Polarization also increases among elites, such that the partisan gap is wider at higher levels of income or education [13-15,51]. Thus, there is evidence of emerging partisan polarization around energy transition, but energy issues are less polarized than more visible social and cultural concerns. In the next section, we advanced a four-part perspective on partisanship (Fig. 1) and identify research needs to understand and mitigate against partisanship (Table 1).

2. A four-part perspective and future research needs

2.1. Cue-receptivity

Partisan identification (e.g. Democrat or Republican) is a social identity, rather than a set of coherent policy positions. Generally, Americans are socialized into a particular partisan identity at a young age, and it is typically unlikely to change over the life-course (e.g. [16–18]), though researchers continue to debate the role of parents and the home environment in the political socialization of children [52,53].

Partisans re-align their viewpoints to match those that are socially appropriate for their given partisan identity via a process wherein elite partisan actors (e.g. media figures, major politicians) shape group norms by providing informational cues [19–21]. Thus, the first component of our four-part perspective on partisanship is that partisan identities (e.g. Republican vs. Democratic) create *cue-receptivity*, a psychological state in which partisans are open to abrupt change in attitudes or behaviors via elite cues. Elite cues are a cognitive heuristic, allowing partisans to make quick judgements (e.g. [21]).

Elite cues have been extensively studied on many topics, such as claims of "media bias" [22], international relations [23] and, perhaps most notably, the existence of climate change [24,20,27]. But elite partisan cues have not been studied extensively around energy transition and energy policy [54]. Thus, the first research priority that we identify is the need to understand cue-taking in the area of energy policy and energy transition.

The social identity perspective on partisanship also highlights how the influence of partisan identities extends far beyond policy. Rather, partisanship also shapes views about what is true about the world. Examples include belief in climate change (e.g [25,26]), the economy

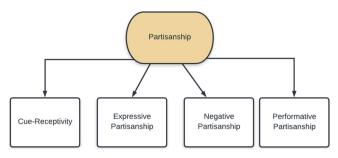


Fig. 1. Four-part Organizing framework for Partisanship.

[28,29] and technological risk perceptions [30,31]. Mayer and Shelley [56] considered support for oil and gas regulations. Some 60% of the partisan gap in policy support is explained by divergent risk perceptions between liberals and conservatives. Hence, a large portion of partisan polarization on energy policy issues is likely caused by different views about the costs and benefits of energy technologies. Thus, the *cue-receptivity* dimension in our four-part organizing framework has two important parts—a *policy preference* component and an *empirical reality* component. That is, *cue-receptivity* allows for both policy preferences and views about what is real and not real to be molded by in-group cues, often from elites.

The second research priority that we identify centers on the critical need to understand how partisanship shapes empirical views about what is true about differing energy technologies, policies and energy transition more broadly. We call upon future scholars to ask how perceptions of the social, economic and ecological impacts of different types of energy development are rooted in partisan identities. For instance, researchers could ask if partisans merely turn to elite cues to understand the viability of renewable energy. We might also expect that partisan cues influence how residents of communities that host energy development—for instance, unconventional oil and gas extraction—assess the economic costs and benefits that their community faces as a result of said development. Although existing research provides some clues about these relationships (e.g. Authors, 2019; [7]), further research is sorely needed, as there are few studies of partisan cue-taking and energy transition.

2.2. Expressive partisanship

Research has also documented the rise of *expressive* partisanship. Expressive partisans are those for whom partisan identities are uniquely salient and generate strong emotions—that is, some partisans place their partisan identity as the center of their sense of self, while for others partisanship is not a key part of their identity [2,32,33]. Counterintuitively, ideological consistency (e.g. the degree to which a person holds consistently liberal or conservative policy preferences) is only loosely related to the strength of partisan identity. For instance, some individuals might be *ideologically* liberal but "liberal" may not be an especially salient identity for that person. Expressive partisanship forms the second part of our four-part conceptualization of partisanship in the United States.

One of the key insights of the burgeoning research on expressive partisanship is that many people do not have a logically consistent, coherent set of beliefs about most policy matters (e.g. [34,2]). In the case of energy transition, we don't know if the observed polarization on energy policy preferences is a result of coherent ideological differences or rooted in expressive partisanship. Thus, a third research need is to understand how expressive partisanship leads, or does not lead, to partisan polarization on issues related to energy policy and the ongoing energy transition. That is, perhaps partisan gridlock could emerge because policy-makers and members of the generally public are strongly wedded to their partisan identities, and hence oppose efforts to

decarbonize the energy system because of these identity-based differences. If the root cause of disagreement between Republican and Democratic voters and political leaders is more about identity than ideological beliefs about the role of the state, this leads to a different set of communication imperatives to reduce polarization and promote greater sustainability. We also know remarkably little about the relationship between elite cues and expressive partisanship. That is, are expressive partisans more or less likely to respond to elite cues?

2.3. Negative partisanship

A related phenomenon is the rise of *negative* partisanship, a phenomenon in which partisans are motivated by negative, often angry, feelings about the other party and not their own policy preferences [35,36]. Negative partisanship often occurs in tandem with affective polarization-the latter is the tendency to dislike and distrust the opposition and to assign negative characteristics to them. Republicans and Democrats in the general public (or self-identified liberals and conservatives) increasingly loathe one another, holding negative stereotypes about the out-group [35,36]. Partyism—intense dislike of the other party-has grown so powerful that some partisans report that they would object to their child marrying a supporter of the partisan out-group [2]. Another symptom of negative partisanship is a focus on "winning" by defeating partisan outgroups in policy struggles or elections, rather than pursuing an affirmative policy agenda [2]. The policy implication of negative partisanship is that strong partisans may oppose a policy because they believe the other party supports the policy. Moving forward, it is imperative that social scientists work to understand the consequences of negative partisanship for energy policy and the broader goal of creating a more just, decarbonized energy system. Some might oppose policies beneficial to their communities, in terms of economic development or public health, purely because of negative partisanship. Further, it is unknown if negative partisanship renders partisans more receptive to elite cues. The central danger of negative partisanship is that, if energy transition efforts become culturally associated with one party or another, the supporters of the opposing party will likely work to thwart said policies, even if they provide broadly shared benefits.

2.4. Performative partisanship

The final component of partisanship relates to the performative aspect of identity—we suggest that partisan identities are a role that partisans enact. Research has documented differential patterns of consumption and lifestyle preferences between Republicans and Democrats in the general public [37-40], although some of these differences are explained by racial, educational and age differences between supporters of the two parties [41]. Importantly, household energy use is also associated with political partisanship (e.g [42]). Although this research is only emerging, it implies that partisanship has behavioral components, wherein ostensibly private behaviors are influenced by partisan identities. Accordingly, the final research need that we identify is the need to understand how (or if) partisan identities become roles that are performed by partisans. That is, how do partisans learn that certain behaviors are appropriate given their partisan identities? Is this a result of elite cues, expressive partisanship, negative partisanship, or all three? What behaviors related to energy use and conservation are rooted in partisan identities? More broadly, what are the implications of understanding partisanship as a performative identity?

3. Reducing the power of partisanship

We have argued that there is a great need to unpack how partisan identity—whether in the form of a cognitive heuristic, expressive partisanship, negative partisanship or performativity—can potentially act as a barrier to transitioning the U.S. energy system towards greater

 Table 1

 Dimensions of partisanship and key research needs.

Dimension of Partisanship	Key Research Needs
Cue-Receptivity	Understand cue-taking in the area of energy policy and energy transition. Understand how partisanship shapes empirical views about what is true about differing energy technologies, policies and energy transition more broadly.
	Understand relationship between cues and other dimensions of partisanship.
Expressive Partisanship	Understand how expressive partisanship leads, or does not lead, to partisan polarization on issues related to energy policy and the ongoing energy transition.
Negative Partisanship	Understand the consequences of negative partisanship for energy policy.
Performative Partisanship	Understand how (or if) partisan identities become roles that are performed by partisans.

sustainability and justice. ¹ Indeed, we believe that partisanship may serve as a more significant barrier than current technological challenges (e.g. large scale energy storage). Yet an even more relevant task for the social sciences is figuring out ways to mitigate the powerful impact of partisanship.

There are various strategies to reduce the influence of partisan identities. Among these, one of the most promising is activing superordinate identities [55]—these are commonly shared identities between groups that otherwise view themselves as rivals. Levendusky [19] finds that priming a shared American identity reduces affective polarization. Yet Mason [2] argues that other types of identities—racial, religious, etc.—are less crosscutting than in the past, potentially reducing the efficacy of priming superordinate identities. Research on wind power in rural, conservative communities suggests that framing wind in terms of local economic development and autonomy-as opposed to pointing out its sustainability benefits-can engender greater support [43] and the mere mention of climate change could cue partisan identities [44]. Thus, re-framing and activating superordinate identities may be a way to reduce partisan polarization around energy transition, but this relationship needs further study. Moving forward, we expect that failure to mitigate against partisanship will further hinder efforts to make the U.S. energy system more sustainable and just. We encourage future researchers to explore additional avenues-such as activating or cultivating alternative social identities or re-framing energy transition—to thwart the power of partisanship.

References

- [1] G.C. Jacobson, Polarization, gridlock, and presidential campaign politics in 2016,
- [2] L. Mason, Uncivil Agreement: How Politics Became Our Identity, University of Chicago Press, 2018.
- [3] Z. Wang, A. Krupnick, A Retrospective Review of Shale Gas Development in the United States: What Led to the Boom? (2013).
- [4] Charles Kolstad, "What Is Killing the US Coal Industry?", Retrieved 1/11/2019 from (2018) https://siepr.stanford.edu/research/publications/what-killing-us-coal-industry.
- [5] D.R. Jones, Party polarization and legislative gridlock, Polit. Res. Q. 54 (2001) 125–141.
- [6] T.B. Kousser, Does partisan polarization lead to policy gridlock in California? Calif. J. Politics Policy 2 (2010).
- [7] C.E. Clarke, et al., Public opinion on energy development: the interplay of issue framing, top-of-mind associations, and political ideology, Energy Policy 81 (2015) 131–140.
- [8] L.C. Stokes, C. Warshaw, Renewable energy policy design and framing influence public support in the United States, Nat. Energy 2 (2017) 17107.
- [9] J.S. Coley, D.J. Hess, Green energy laws and Republican legislators in the United States, Energy Policy 48 (2012) 576–583.
- [10] D.J. Hess, J.S. Coley, Q.D. Mai, L.R. Hilliard, Party differences and energy reform: fiscal conservatism in the California legislature, Environ. Polit. 24 (2015) 228–248.
- [11] D.J. Hess, K.P. Brown, Green tea: clean-energy conservatism as a countermovement,

- Environ. Sociol. 3 (2017) 64-75.
- [12] M. Vasseur, Convergence and divergence in renewable energy policy among US states from 1998 to 2011, Soc. Forces 92 (2014) 1637–1657.
- [13] J. Bohr, Public views on the dangers and importance of climate change: predicting climate change beliefs in the United States through income moderated by party identification, Clim. Change 126 (2014) 217–227.
- [14] M.J. Cutler, Seeing and believing: the emergent nature of extreme weather perceptions, Environ. Sociol. 1 (2015) 293–303.
- [15] A.M. McCright, Political orientation moderates Americans' beliefs and concern about climate change, Clim. Change 104 (2011) 243–253.
- [16] V. Sapiro, Not your parent's political socialization: introduction for a New Generation, Annu. Rev. Polit. Sci. 7 (2004) 1–23.
- [17] A.S. Zuckerman, J. Dasovic, J. Fitzgerald, Partisan Families: the Social Logic of Bounded Partisanship in Germany and Britain, Cambridge University Press, 2007.
- [18] J. Lyons, The family and partisan socialization in red and Blue America, Polit. Psychol. 38 (2017) 297–312.
- [19] M.S. Levendusky, Clearer cues, more consistent voters: a benefit of elite polarization, Polit. Behav. 32 (2010) 111–131.
- [20] J.T. Carmichael, R.J. Brulle, Elite cues, media coverage, and public concern: an integrated path analysis of public opinion on climate change, 2001–2013, Environ. Polit. 26 (2017) 232–252.
- [21] G.L. Cohen, Party over policy: the dominating impact of group influence on political beliefs, J. Pers. Soc. Psychol. 85 (5) (2003) 808.
- [22] M.D. Watts, D. Domke, D.V. Shah, D.P. Fan, Elite cues and media bias in presidential campaigns: explaining public perceptions of a liberal press, Commun. Res. 26 (1999) 144–175.
- [23] A. Guisinger, E.N. Saunders, Mapping the boundaries of elite cues: how elites shape mass opinion across international issues, Int. Stud. Q. 61 (2017) 425–441.
- [24] R.J. Brulle, J. Carmichael, J.C. Jenkins, Shifting public opinion on climate change: an empirical assessment of factors influencing concern over climate change in the US, 2002–2010, Clim. Change 114 (2012) 169–188.
- [25] A.M. McCright, R.E. Dunlap, Cool dudes: the denial of climate change among conservative white males in the United States, Glob. Environ. Change Part A 21 (2011) 1163–1172.
- [26] A.M. McCright, R.E. Dunlap, The politicization of climate change and polarization in the American public's views of global warming, 2001–2010, Sociol. Q. 52 (2011) 155–194.
- [27] M. Tesler, Elite domination of public doubts about climate change (not evolution), Polit. Commun. 35 (2018) 306–326.
- [28] M. Bisgaard, R. Slothuus, Partisan elites shape citizens' economic beliefs, Behav. Brain Sci. 41 (2018).
- [29] M. Bisgaard, Perceiving the Unobservable: How Partisanship and Everyday Life Influence Citizens' Perceptions of the National Economy, Forlaget Politica, 2016.
- [30] S.K. Yeo, et al., Partisan amplification of risk: american perceptions of nuclear energy risk in the wake of the Fukushima Daiichi disaster, Energy Policy 67 (2014) 727–736.
- [31] C.E. Clarke, D.T. Evensen, The politics of scientific consensus? Political divergence and partisanship in unconventional energy development in the United States, Energy Res. Soc. Sci. 51 (2019) 156–167.
- [32] L. Huddy, L. Mason, L. Aarøe, Measuring partisanship as a social identity, predicting political activism, Annual Meeting of the International Society for Political Psychology, (2010).
- [33] L. Mason, J. Wronski, One tribe to bind them all: how our social group attachments strengthen partisanship, Polit. Psychol. 39 (2018) 257–277.
- [34] L. Huddy, L. Mason, L. Aarøe, Expressive partisanship: campaign involvement, political emotion, and partisan identity, Am. Polit. Sci. Rev. 109 (2015) 1–17.
- [35] A.I. Abramowitz, S. Webster, The rise of negative partisanship and the nationalization of US elections in the 21st century, Elect. Stud. 41 (2016) 12–22.
- [36] A.I. Abramowitz, S.W. Webster, Negative partisanship: why americans dislike parties but behave like rabid partisans, Polit. Psychol. 39 (2018) 119–135.
- [37] A.S. Gerber, G.A. Huber, Partisanship and economic behavior: Do partisan differences in economic forecasts predict real economic behavior? Am. Polit. Sci. Rev. 103 (2009) 407–426.
- [38] D.J. Coffey, P.H. Joseph, A polarized environment: the effect of partisanship and ideological values on individual recycling and conservation behavior, Am. Behav. Sci. 57 (2013) 116–139.
- [39] J.L. Peifer, S. Khalsa, E. Howard Ecklund, Political conservatism, religion, and environmental consumption in the United States, Environ. Polit. 25 (2016) 661–689
- [40] E.K. Smith, L.M. Hempel, K. MacIlroy, What's 'evangelical'got to do with it?

This piece is focused on the U.S., where the study of partisanship, energy policy and related issues (e.g. climate change) is the most developed. However, attitudes towards climate change are polarized along partisan lines in some Western European states (e.g. [45,57]), Canada ([46]) and Australia ([47]). Emerging evidence suggest that party cues are salient for nuclear power in Belgium ([48]), but further work outside the U.S. is needed.

- Disentangling the impact of evangelical Protestantism on environmental outcomes, Environ. Polit. 27 (2018) 292–319.
- [41] D. DellaPosta, Y. Shi, M. Macy, Why do liberals drink lattes? Am. J. Sociol. 120 (2015) 1473–1511.
- [42] D.M. Gromet, H. Kunreuther, R.P. Larrick, Political ideology affects energy-efficiency attitudes and choices, Proc. Natl. Acad. Sci. (2013) 201218453.
- [43] S.K. Olson-Hazboun, R.S. Krannich, P.G. Robertson, Public views on renewable energy in the Rocky Mountain region of the United States: distinct attitudes, exposure, and other key predictors of wind energy, Energy Res. Soc. Sci. 21 (2016) 167–179.
- [44] M.C. Nisbet, Communicating climate change: why frames matter for public engagement, Environ. Sci. Policy Sustain. Dev. 51 (2009) 12–23.
- [45] A.M. McCright, R.E. Dunlap, S.T. Marquart-Pyatt, Political ideology and views about climate change in the European Union, Environ. Polit. 25 (2016) 338–358.
- [46] E. Lachapelle, C.P. Borick, B. Rabe, Public attitudes toward climate science and climate policy in federal systems: canada and the United States compared 1, Rev. Policy Res. 29 (2012) 334–357.
- [47] B. Tranter, Political divisions over climate change and environmental issues in Australia, Env. Polit. 20 (2011) 78–96.
- [48] E. Latré, P. Thijssen, T. Perko, The party politics of nuclear energy: party cues and public opinion regarding nuclear energy in Belgium, Energy Res. Soc. Sci. 47 (2019) 192–201.

- [49] EIA, Annual Energy Outlook 2017 with Projections to 2050, United States Energy Information Administration, 2017.
- [50] SEIA, Solar Energy Growing at a Record Pace, (2018) Retrieved December 5, 2018 from: https://www.seia.org/solar-industry-data.
- [51] A. Mayer, E.K. Smith, Education, political affiliation and energy policy in the United States: A case of Tea Party exceptionalism? Energy Res. Soc. Sci. 23 (2017) 74–81.
- [52] C. Ojeda, P.K. Hatemi, Accounting for the child in the transmission of party identification, Am. Sociological Rev. 80 (6) (2015) 1150–1174.
- [53] S. Iyengar, T. Konitzer, K. Tedin, The home as a political fortress: family agreement in an era of polarization, J. Polit. 80 (4) (2018) 1326–1338.
- [54] A. Mayer, National energy transition, local partisanship? Elite cues, community identity, and support for clean power in the United States, Energy Res. Soc. Sci. 50 (2019) 143–150.
- [55] J.F. Dovidio, S.L. Gaertner, G. Kafati, Group identity and intergroup relations The common in-group identity model, Advances in Group Processes, Emerald Group Publishing Limited, 2000, pp. 1–35.
- [56] A. Mayer, T.O.C. Shelley, The dual importance of political identity in environmental governance: the case of oil and gas policy in Colorado, Soc. Nat. Res. 31 (11) (2018) 1230–1247.
- [57] E.K. Smith, A. Mayer, Anomalous Anglophones? Contours of free market ideology, political polarization, and climate change attitudes in English-speaking countries, Western European and post-Communist states, Clim. Change (2019) 1–18.